



Infrastructure, buildings, environment, communications

*I. Soler*

Paul J. Kurzanski  
Manager Environmental Remediation  
500 Water Street, J-275  
Jacksonville, FL 32202

ARCADIS G&M of Michigan, LLC  
25200 Telegraph Road  
Southfield  
Michigan 48034  
Tel 248 936 8000  
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www.arcadis-us.com

Subject:

Former W.R. Grace Asbestos Investigation, N-Forcer Site; CSXT No. R008210,  
CSX Transportation, Inc, Dearborn, Michigan

ENVIRONMENTAL

Dear Mr. Kurzanski:

Date:

February 8, 2005

ARCADIS is pleased to provide CSX Transportation, Inc. (CSXT) with the results of the asbestos investigation at the former W.R. Grace Asbestos Plant in Dearborn, Michigan (see Figure 1). On November 12, 2004, ARCADIS completed an asbestos investigation along a rail-road line in Dearborn, Michigan, as requested by CSXT on November 10, 2004. The investigation was conducted because the United States Environmental Protection Agency (USEPA) requested a conference call with CSXT to discuss possible environmental impacts on the CSXT property.

Contact:

Terri Rubis

Phone:

248.936.8268

Email:

trubis@arcadis-us.com

## Background

The rail line is located adjacent to a former vermiculite processing plant in Dearborn, Michigan. A sidetrack was diverted from the main line to service the plant at 14300 Henn Street. The track was used to deliver raw material to the plant.

Our ref:

SFE04044.0001

## Site Activities

ARCADIS retained Young's Environmental Cleanup Inc (Young's) of Flint, Michigan, an asbestos certified contractor, to collect soil samples (SB-1 through SB-14) along the active track within the CSXT right-of-way (ROW) on November 12, 2004. The CSXT ROW at the former W.R. Grace property extends approximately 15 feet from a track number 1 to the west. The samples were collected at depths ranging from ground surface to 12 inches below ground surface. The sample locations are depicted on the attached Figure 2. Table 1 summarizes the analytical results. Appendix A shows site photographs.

The soil encountered along the track consisted of a thin layer of brown clay of inconsistent thickness; the thin clay layer was not present in a few locations. Beneath the clay, fine black sand was encountered. The sand contained small amounts of gravel, and according to Young's asbestos contractor supervisor, a reflective material

Part of a bigger picture

US EPA RECORDS CENTER REGION 5



467458

that may be vermiculite. The fill sand reached a thickness of up to 12 inches. Beneath the fill sand, brown clay was encountered. The clay extended to a depth of 24 inches below ground surface. The sampling depth was dictated by the encountered soil type. In areas where clay was encountered at the surface, the samples were collected in the deeper sand. The clay did not show signs of vermiculite fiber which would have been washed out during rain events.

Soil samples for asbestos analysis were collected from the sand layer using a hand auger and were biased to visually impacted areas based on visual observations.

The samples were delivered to APEX Research, an asbestos certified laboratory in Whitmore Lake, Michigan, along with the appropriate chain-of-custody documentation.

Based on the November 16, 2004 USEPA conference call, ARCADIS visited the site for a visual inspection of the area near the vacant industrial spur on November 23, 2004. The USEPA had detected traces of raw vermiculite or zonolite in that area. ARCADIS found four fragments (three white fragments and one black fragment) of suspicious material that may be raw vermiculite on the surface near Soil Boring SB-1. The fragments were collected (SB-15) and submitted to APEX Research for asbestos analyses along with the appropriate chain-of-custody documentation.

## Results

No asbestos structures (i.e. fibers, bundles) were detected in any of the 15 soil samples collected at the site on November 12 and 23, 2004.

However, the laboratory analysis of Soil Sample SB-15 has determined that one of the white fragments had a green fibrous mineral appearance on one side and was identified as a currently unregulated amphibole mineral. The black fragment and the two remaining white fragments are non-asbestos containing and appear to be gravel or rock fragments.

Figure 2 depicts the location of the samples; Table 1 summarizes the analytical result. The laboratory results are attached in Appendix B.

ARCADIS

Mr. Paul J. Kurzanski  
February 8, 2005

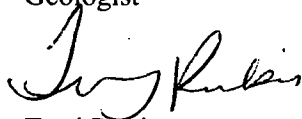
Please contact any of the undersigned at 248.936.8000 if you should have any questions.

Sincerely,

ARCADIS G&M of Michigan, LLC



Christian Seidel  
Geologist



Terri Rubis  
Project Manager



Robert A. Ferree, CPG  
Vice President



## ARCADIS

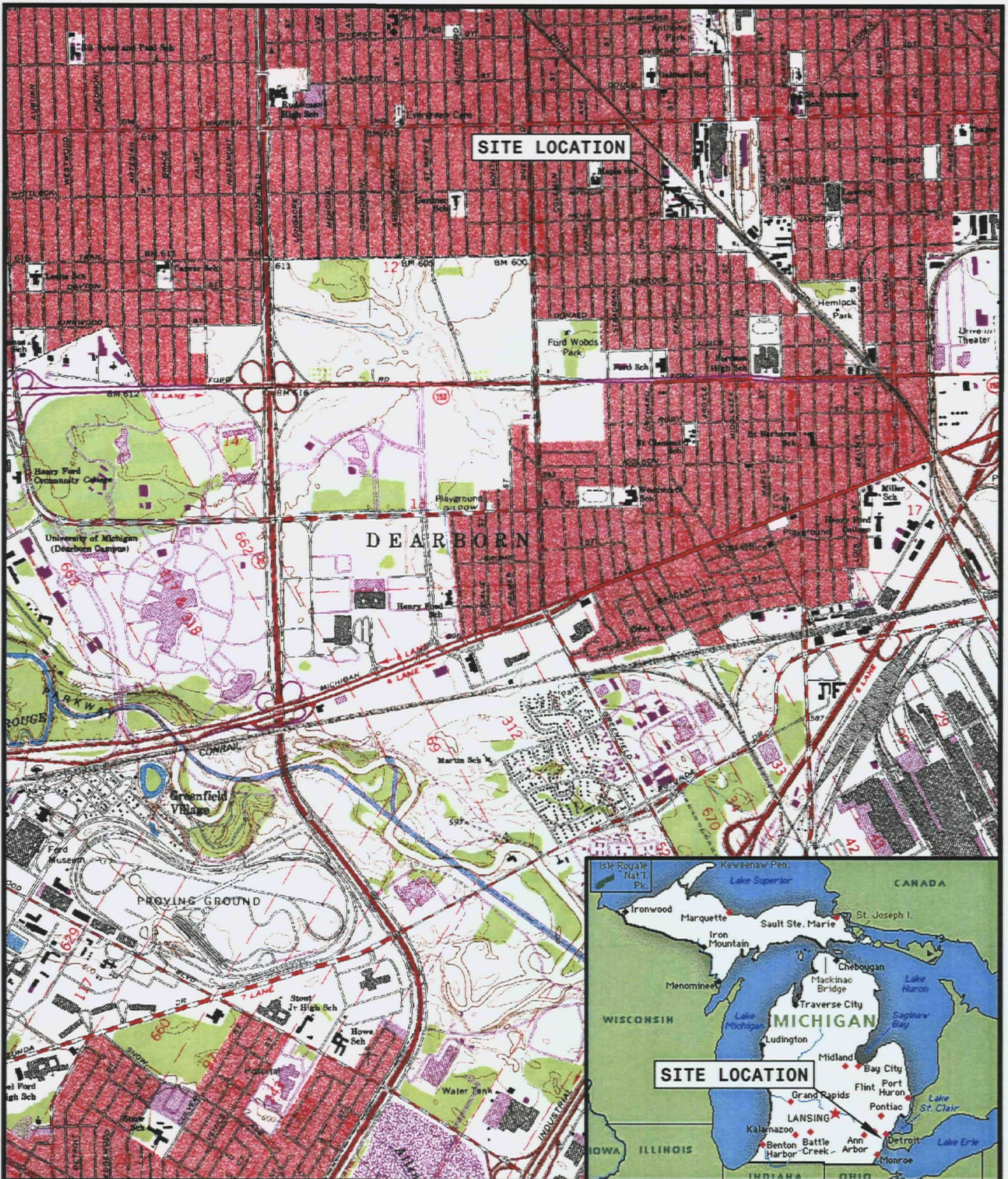
**Table 1. Former W.R. Grace Asbestos Investigation, N-Forcer Site, CSXT No. R008210, Dearborn, Michigan.**

Sample Identification		Depth Collected (inch below surface)	Sample Medium	Result
SB-1		Surface	Sand	NSD
SB-2		6	Sand	NSD
SB-3		3	Sand	NSD
SB-4		10	Sand	NSD
SB-5		10	Sand	NSD
SB-6		12	Sand	NSD
SB-7		12	Sand	NSD
SB-8		12	Sand	NSD
SB-9		Surface	Sand	NSD
SB-10		Surface	Sand	NSD
SB-11		6	Sand	NSD
SB-12		6	Sand	NSD
SB-13		3	Sand	NSD
SB-14		4	Sand	NSD
SB-15	White Fragment 1 *	Surface	Rock Fragment	NSD
SB-15	White Fragment 2	Surface	Rock Fragment	NSD
SB-15	White Fragment 3	Surface	Rock Fragment	NSD
SB-15	Black Fragment	Surface	Rock Fragment	NSD

## Notes:

NSD No asbestos structures detected.  
 \* Visual fibrous materials indicated in sample.



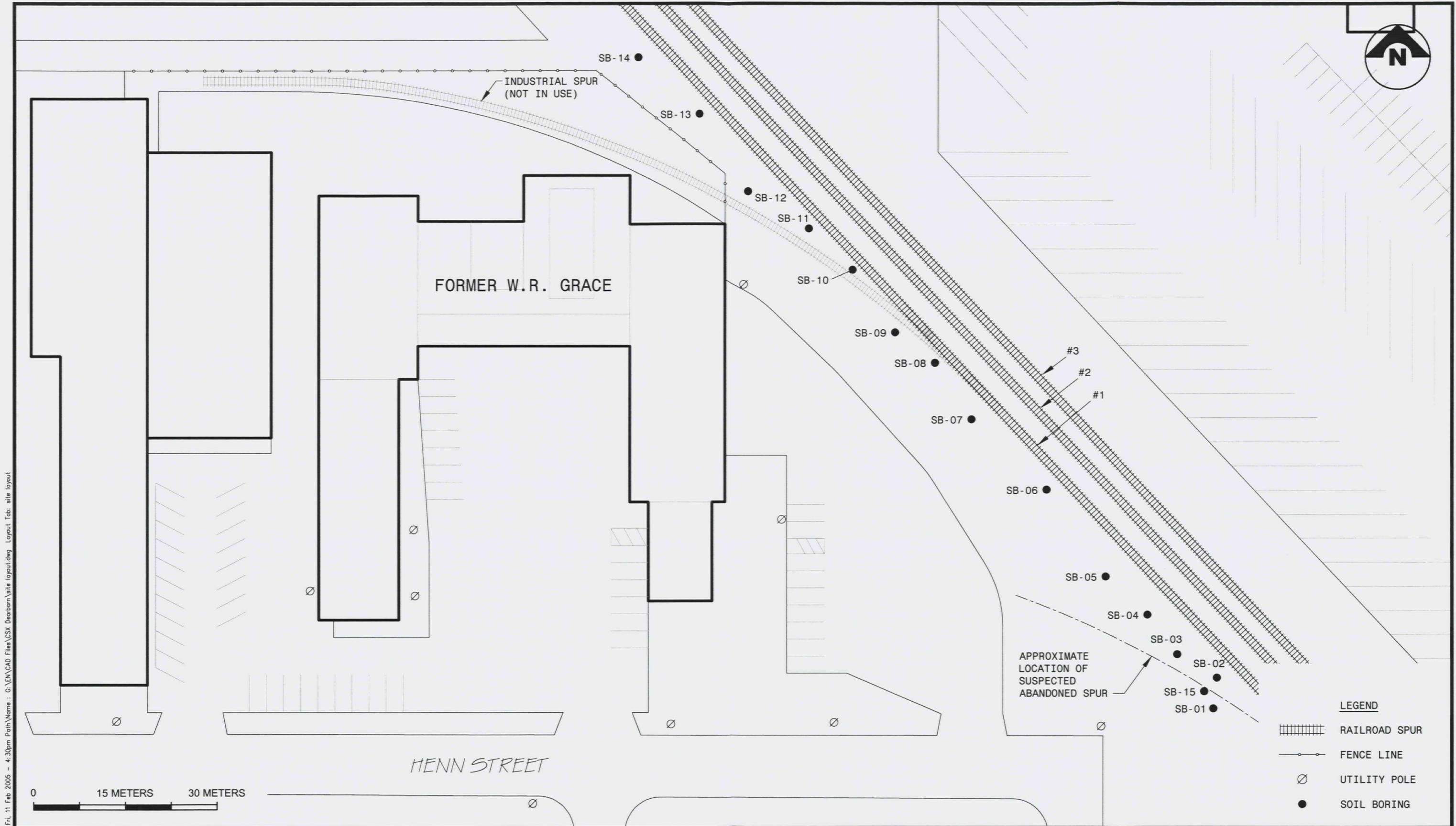


Area Manager	R. FERREE
Project Director	T. RUBIS
Task Manager	C. SEIDEL
Technical Review	C. SEIDEL

**ARCADIS**  
 25200 Telegraph Road  
 Southfield, Michigan 48034  
 Tel: 248-936-8000 Fax: 248-836-8111  
 www.arcadis-us.com

CSXT TRANSPORTATION  
**SITE LOCATION**  
 DEARBORN, MICHIGAN

Project Number  
 SFE04044.01.01  
 Drawing Date  
 11-FEB-05  
 Figure



User Name : T:\brough Data\Time : Fri, 11 Feb 2005 - 4:30pm Path\Name : G:\EN\CAD Files\CSX Dearborn\site layout.dwg Layout Tab: site layout

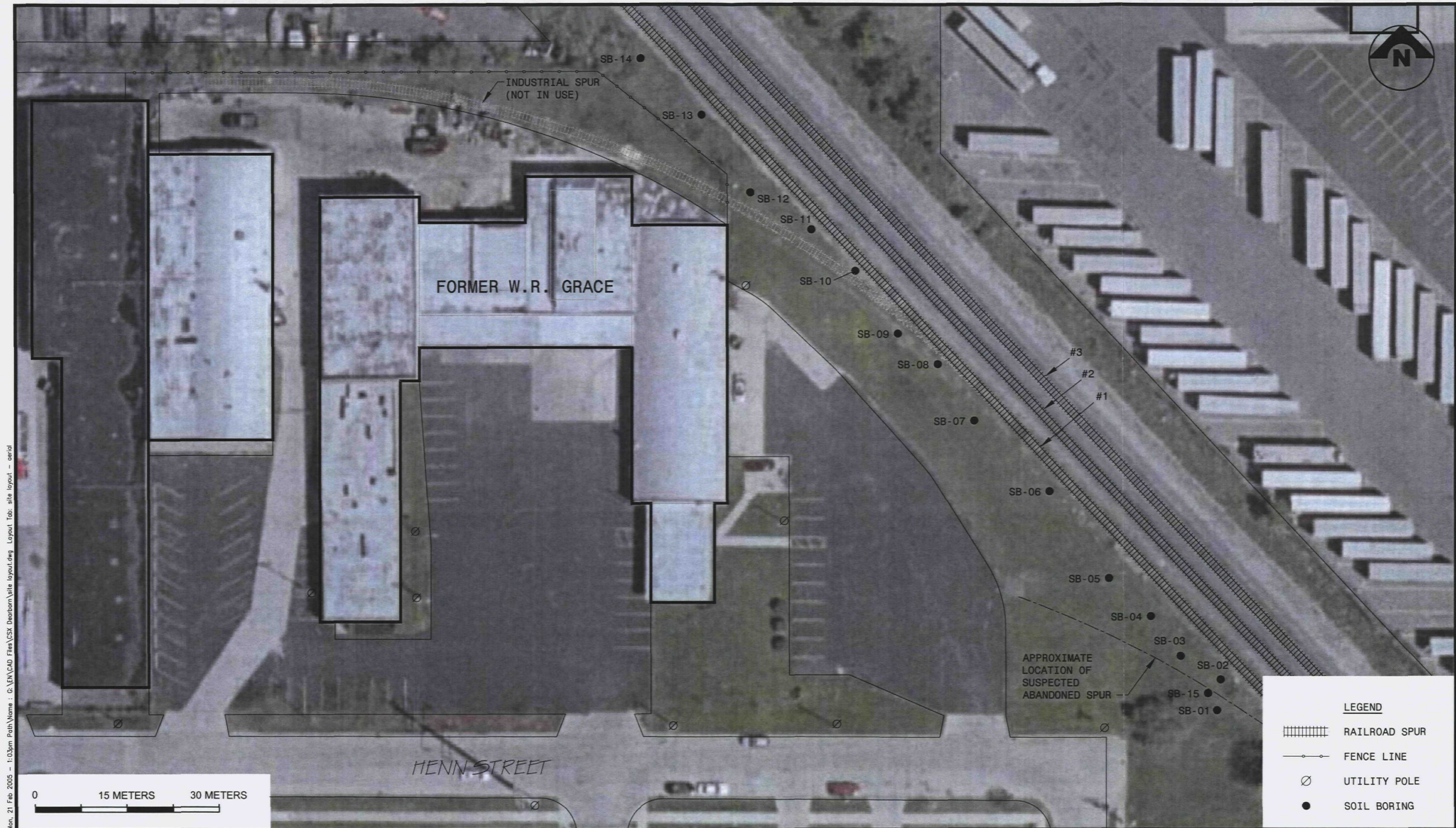
Area Manager R. FERREE	 25200 Telegraph Road Southfield, Michigan 48034 Tel: 248-936-8000 Fax: 248-836-8111 www.arcadis-us.com
Project Director T. RUBIS	
Task Manager C. SEIDEL	
Technical Review C. SEIDEL	

CSXT TRANSPORTATION

**SITE LAYOUT SHOWING SAMPLE LOCATIONS**

DEARBORN, MICHIGAN

Project Number	SFE04044.01.01
Drawing Date	11-FEB-05
Figure	2



User Name : mklemmier Date/Time : Mon, 21 Feb 2005 - 1:03pm Path Name : G:\EN\CAD Files\CSX Dearborn\site layout.dwg Layout Tab: site layout - aerial

Area Manager R. FERREE	 25200 Telegraph Road Southfield, Michigan 48034 Tel: 248-936-8000 Fax: 248-836-8111 www.arcadis-us.com
Project Director T. RUBIS	
Task Manager C. SEIDEL	
Technical Review C. SEIDEL	

CSXT TRANSPORTATION

SITE LAYOUT SHOWING SAMPLE LOCATIONS

DEARBORN, MICHIGAN

Project Number	SFE04044.01.01
Drawing Date	21-FEB-05
Figure	3





Infrastructure, buildings, environment, communications

CSXT Project No.: R008210  
CSXT Project Name: N-Forcer Site  
City/State: Dearborn, Michigan



Photo No.: 1  
Date: November 12, 2004  
Direction: North  
Description:  
View of sample collected near the industrial spur

ARCADIS  
Project No.: SFE04044.0001



Photo No.: 2  
Date: November 12, 2004  
Direction: South  
Description:  
View along track number 1; Smaller tree at end of suspected abandoned spur

ARCADIS  
Project No.: SFE04044.0001



Infrastructure, buildings, environment, communications

CSXT Project No.: R008210  
CSXT Project Name: N-Forcer Site  
City/State: Dearborn, Michigan



Photo No.: 3  
Date: November 12, 2004  
Direction: North  
Description:  
View of the industrial spur

ARCADIS  
Project No.: SFE04044.0001



Photo No.: 4  
Date: November 12, 2004  
Direction: South  
Description:  
View of the industrial spur

ARCADIS  
Project No.: SFE04044.0001



# Certificate of Laboratory Analysis

## TEM Bulk Sample Analysis



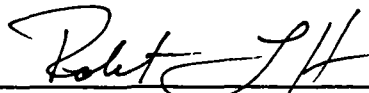
Project: Dearborn

Report to: Mr. Phil Peterson  
Fibertech Environmental Services, Inc.  
2280 Aurelius Road  
Holt, MI 48842

ARL # 04-T1142  
Date Received: 11-14-04  
Date Analyzed: 11-15-04  
Date Reported: 11-18-04

ARL # T1142-01 Client Sample # SB-1	Sample Date: 11-12-04 Material: Soil Location: Surface
<b>Asbestos Detected: NO</b>  <b>Type of Asbestos:</b>  <b>Percent of Asbestos : 0.0%</b>  <b>Gravimetrically Reduced Sample: 34.8%</b>	
ARL # T1142-02 Client Sample # SB-2	Sample Date: 11-12-04 Material: Soil Location: 6"
<b>Asbestos Detected: NO</b>  <b>Type of Asbestos:</b>  <b>Percent of Asbestos : 0.0%</b>  <b>Gravimetrically Reduced Sample: 21.6%</b>	

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Robert T. Letarte, Jr. Laboratory Director

**NIST-NVLAP Accreditation No. 102118**

Methodology: Transmission Electron Microscopy (TEM) In Accordance with ELAP "TEM Method For Identifying and Quantitating Asbestos in Non-Friable Organically Bound Bulk Samples", Revision 198.4, 8/3/92

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# Certificate of Laboratory Analysis

## TEM Bulk Sample Analysis

Project: Dearborn




**Report to:** Mr. Phil Peterson  
Fibertech Environmental Services, Inc.  
2280 Aurelius Road  
Holt, MI 48842

ARL # 04-T1142  
Date Received: 11-14-04  
Date Analyzed: 11-15-04  
Date Reported: 11-18-04

ARL # T1142-03 Client Sample # SB-3	Sample Date: 11-12-04 Material: Soil Location: 3"
<p><b>Asbestos Detected: NO</b></p> <p><b>Type of Asbestos:</b></p> <p><b>Percent of Asbestos : 0.0%</b></p> <p><b>Gravimetrically Reduced Sample: 20.3%</b></p>	
ARL # T1142-04 Client Sample # SB-4	Sample Date: 11-12-04 Material: Soil Location: 6"
<p><b>Asbestos Detected: NO</b></p> <p><b>Type of Asbestos:</b></p> <p><b>Percent of Asbestos : 0.0%</b></p> <p><b>Gravimetrically Reduced Sample: 42.6%</b></p>	

  
Analyst

  
Robert T. Letarte, Jr. Laboratory Director

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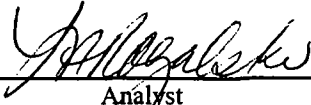
## TEM Bulk Sample Analysis

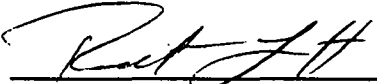
Project: Dearborn

**Report to:** Mr. Phil Peterson  
Fibertech Environmental Services, Inc.  
2280 Aurelius Road  
Holt, MI 48842

ARL # 04-T1142  
Date Received: 11-14-04  
Date Analyzed: 11-15-04  
Date Reported: 11-18-04

ARL # T1142-05 Client Sample # SB-5	Sample Date: 11-12-04 Material: Soil Location: 10"
<b>Asbestos Detected: NO</b>  <b>Type of Asbestos:</b>  <b>Percent of Asbestos : 0.0%</b>  <b>Gravimetrically Reduced Sample: 8.9%</b>	
ARL # T1142-06 Client Sample # SB-6	Sample Date: 11-12-04 Material: Soil Location: 12"
<b>Asbestos Detected: NO</b>  <b>Type of Asbestos:</b>  <b>Percent of Asbestos : 0.0%</b>  <b>Gravimetrically Reduced Sample: 10.3%</b>	

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Robert T. Letarte, Jr. Laboratory Director

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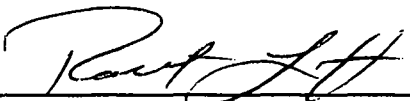
Project: Dearborn

**Report to:** Mr. Phil Peterson  
Fibertech Environmental Services, Inc.  
2280 Aurelius Road  
Holt, MI 48842

ARL # 04-T1142  
Date Received: 11-14-04  
Date Analyzed: 11-15-04  
Date Reported: 11-18-04

ARL # T1142-07 Client Sample # SB-7	Sample Date: 11-12-04 Material: Soil Location: 12"
<b>Asbestos Detected: NO</b>  <b>Type of Asbestos:</b>  <b>Percent of Asbestos : 0.0%</b>  <b>Gravimetrically Reduced Sample: 10.6%</b>	
ARL # T1142-08 Client Sample # SB-8	Sample Date: 11-12-04 Material: Soil Location: 12"
<b>Asbestos Detected: NO</b>  <b>Type of Asbestos:</b>  <b>Percent of Asbestos : 0.0%</b>  <b>Gravimetrically Reduced Sample: 11.4%</b>	

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Robert T. Letarte, Jr. Laboratory Director

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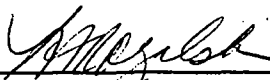
## TEM Bulk Sample Analysis


Project: Dearborn

**Report to:** Mr. Phil Peterson  
Fibertech Environmental Services, Inc.  
2280 Aurelius Road  
Holt, MI 48842

ARL # 04-T1142  
Date Received: 11-14-04  
Date Analyzed: 11-15-04  
Date Reported: 11-18-04

ARL # T1142-09 Client Sample # SB-9	Sample Date: 11-12-04 Material: Soil Location: Surface
<b>Asbestos Detected: NO</b>  <b>Type of Asbestos:</b>  <b>Percent of Asbestos : 0.0%</b>  <b>Gravimetrically Reduced Sample: 24.9%</b>	
ARL # T1142-10 Client Sample # SB-10	Sample Date: 11-12-04 Material: Soil Location: Surface
<b>Asbestos Detected: NO</b>  <b>Type of Asbestos:</b>  <b>Percent of Asbestos : 0.0%</b>  <b>Gravimetrically Reduced Sample: 23.2%</b>	

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Robert T. Letarte, Jr. Laboratory Director

**NIST-NVLAP Accreditation No. 102118**

Methodology: Transmission Electron Microscopy (TEM) In Accordance with ELAP "TEM Method For Identifying and Quantitating Asbestos in Non-Friable Organically Bound Bulk Samples", Revision 198.4, 8/3/92

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# Certificate of Laboratory Analysis

## TEM Bulk Sample Analysis


Project: Dearborn

**Report to:** Mr. Phil Peterson  
Fibertech Environmental Services, Inc.  
2280 Aurelius Road  
Holt, MI 48842

ARL # 04-T1142  
Date Received: 11-14-04  
Date Analyzed: 11-15-04  
Date Reported: 11-18-04

ARL # T1142-11 Client Sample # SB-11	Sample Date: 11-12-04 Material: Soil Location: 6"
<b>Asbestos Detected: NO</b>  <b>Type of Asbestos:</b>  <b>Percent of Asbestos : 0.0%</b>  <b>Gravimetrically Reduced Sample: 38.0%</b>	
ARL # T1142-12 Client Sample # SB-12	Sample Date: 11-12-04 Material: Soil Location: 6"
<b>Asbestos Detected: NO</b>  <b>Type of Asbestos:</b>  <b>Percent of Asbestos : 0.0%</b>  <b>Gravimetrically Reduced Sample: 44.1%</b>	

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Robert T. Letarte, Jr. Laboratory Director

**NIST-NVLAP Accreditation No. 102118**

Methodology: Transmission Electron Microscopy (TEM) In Accordance with ELAP "TEM Method For Identifying and Quantitating Asbestos in Non-Friable Organically Bound Bulk Samples", Revision 198.4, 8/3/92

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# Certificate of Laboratory Analysis


## TEM Bulk Sample Analysis

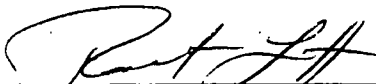
Project: Dearborn

**Report to:** Mr. Phil Peterson  
Fibertech Environmental Services, Inc.  
2280 Aurelius Road  
Holt, MI 48842

ARL # 04-T1142  
Date Received: 11-14-04  
Date Analyzed: 11-15-04  
Date Reported: 11-18-04

ARL # T1142-13 Client Sample # SB-13	Sample Date: 11-12-04 Material: Soil Location: 3"
<b>Asbestos Detected: NO</b>  <b>Type of Asbestos:</b>  <b>Percent of Asbestos : 0.0%</b>  <b>Gravimetrically Reduced Sample: 25.1%</b>	
ARL # T1142-14 Client Sample # SB-14	Sample Date: 11-12-04 Material: Soil Location: 6"
<b>Asbestos Detected: NO</b>  <b>Type of Asbestos:</b>  <b>Percent of Asbestos : 0.0%</b>  <b>Gravimetrically Reduced Sample: 38.1%</b>	

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Robert T. Letarte, Jr. Laboratory Director

**NIST-NVLAP Accreditation No. 102118**

Methodology: Transmission Electron Microscopy (TEM) In Accordance with ELAP "TEM Method For Identifying and Quantitating Asbestos in Non-Friable Organically Bound Bulk Samples", Revision 198.4, 8/3/92

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## CHAIN OF CUSTODY

## LABORATORY INFORMATION

APEX Research/FiberTech

Phone: 734.449.9990

11054 HiTech Drive

Fax:

Whitmore Lake, MI 48183

COC # N° 901942

## SHIPMENT INFORMATION

Shipment Method: hand delivery

Shipment Tracking No: —

## CSXT PROJECT INFORMATION

CSXT Project Number:

S HHA 5.5.11/12/04 Pending C.C. 4/8/2004

CSXT Project Name:

CSXT Dearborn

CSXT Contact:

Paul Kurzanski

Proj. State (State of Origin): MI

Proj. City:

Dearborn

CSXT Project Name:

OW Grace Dearborn

LWON:

HHA 5.5.11/12/04 Pending

## CONSULTANT INFORMATION

Company:

ARCADIS

Address:

25200 Telegraph Road

City, State, Zip:

Southfield MI 48034

Project #:

SFE04044.0001.00001

PM:

Terri Rubis

Email:

trubis@arcadis-us.com

Phone:

248.936.8000

Fax: 248.936.8111

## Turnaround Time:

☐ Standard 6-13 Days☒ 1 Day Rush

Specify # Days \_\_\_\_\_

☐ 2 Day Rush☐ Standard 14 Days☐ 3 Day Rush☐ Other \_\_\_\_\_

## Deliverables:

☐ Other Deliv: \_\_\_\_\_☒ CSXT Standard (Level II)☐ Level III☐ EDD Required, Format: \_\_\_\_\_☐ Level IV

## Preservative Codes:

3 = Sulfuric Acid

Note: ☒ 0

0 = No Preservative

4 = Sodium Thiosulfate

Pres. Code

1 = Hydrochloric Acid

5 = Sodium Hydroxide

2 = Nitric Acid

6 = Other \_\_\_\_\_

## Matrix Codes:

SO = Soil

LIQ = Liquid

GW = Groundwater

SL = Sludge

WW = Waste Water

OI = Oil

SW = Surface Water

SOL = Other Solid

## METHODS FOR ANALYSIS

## COMMENTS

## LAB USE

## SAMPLE INFORMATION

Sample Identification	Containers Number & Type	Sample Collection			Filtered Y or N	Type Comp or Grab	Matrix Code	Asbestos TEM	METHODS FOR ANALYSIS								COMMENTS	LAB USE
		Date	Time	Sampler														
SB-1 Surface	1, 402	11/12/04	11:32	JW	N	Grab	SO	x										
SB-2 6"	1, 402	11/12/04	11:34	JW	N	Grab	SO	x										
SB-3 3"	1, 402	11/12/04	11:42	JW	N	Grab	SO	x										
SB-4 6"	1, 402	11/12/04	11:52	JW	N	Grab	SO	x										
SB-5 10"	1, 402	11/12/04	11:57	JW	N	Grab	SO	x										
SB-6 12"	1, 402	11/12/04	12:01	JW	N	Grab	SO	x										
SB-7 12"	1, 402	11/12/04	12:05	JW	N	Grab	SO	x										
SB-8 12"	1, 402	11/12/04	12:10	JW	N	Grab	SO	x										
SB-9 Surface	1, 402	11/12/04	12:15	JW	N	Grab	SO	x										
SB-10 Surface	1, 402	11/12/04	12:18	JW	N	Grab	SO	x										

Relinquished By: <i>[Signature]</i>	Date Time: 11/12/04 15:25	Received By: <i>[Signature]</i>	Date Time: 11-12-04 3:25p	Comments & Special Analytical Requirements:	
Relinquished By:	Date Time:	Received By:	Date Time:		
Relinquished By:	Date Time:	Received By:	Date Time:		
Received By Laboratory:	Date Time:	Lab Remark: APEX RESEARCH REQUEST REVIEW	LAB USE: <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal #	LAB Log Number #



# Certificate of Laboratory Analysis

## TEM Bulk Sample Analysis

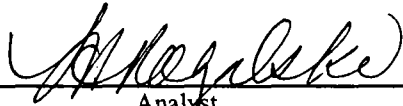



Project: N-Forcer Site  
Project # R008210

**Report to:** Ms. Terri Rubis  
Arcadis  
25200 Telegraph  
Southfield, MI 48034

ARL # 04-T1154  
Date Received: 12-14-04  
Date Analyzed: 12-14-04  
Date Reported: 12-16-04

ARL # T1154-01 Client Sample # SB-15, Surface	Sample Date: 11-23-04 Material: Soil, White Location:
<b>Asbestos Detected: NO</b>  <b>Type of Asbestos:</b>  <b>Percent of Asbestos :</b>  <b>Gravimetrically Reduced Sample: 1.0%</b>	
ARL # T1154-02 Client Sample # SB-15, Surface	Sample Date: 11-23-04 Material: Soil, Black Location:
<b>Asbestos Detected: NO</b>  <b>Type of Asbestos:</b>  <b>Percent of Asbestos :</b>  <b>Gravimetrically Reduced Sample: 5.1%</b>	

  
Analyst

  
Robert T. Letarte, Jr. Laboratory Director

**NIST-NVLAP Accreditation No. 102118**

Methodology: Transmission Electron Microscopy (TEM) In Accordance with ELAP "TEM Method For Identifying and Quantitating Asbestos in Non-Friable Organically Bound Bulk Samples", Revision 1984, 8/3/92

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# Certificate of Laboratory Analysis

## TEM Bulk Sample Analysis



Project: N-Forcer Site

Project # R008210

**Report to:** Ms. Terri Rubis  
Arcadis  
25200 Telegraph  
Southfield, MI 48034

ARL # 04-T1154

Date Received: 12-14-04

Date Analyzed: 12-14-04

Date Reported: 12-16-04

ARL # T1154-03 Client Sample # SB-15, Surface	Sample Date: 11-23-04 Material: Soil, Greenish White Location:
Asbestos Detected: NO  Type of Asbestos :  Percent of Asbestos :  Gravimetrically Reduced Sample: 2.3%	
ARL # T1154-04 Client Sample # SB-15, Surface	Sample Date: 11-23-04 Material: Soil, White Location:
Asbestos Detected: NO  Type of Asbestos:  Percent of Asbestos :  Gravimetrically Reduced Sample: 0.7%	

Analyst

Robert T. Letarte, Jr. Laboratory Director

**NIST-NVLAP Accreditation No. 102118**

Methodology: Transmission Electron Microscopy (TEM) In Accordance with ELAP "TEM Method For Identifying and Quantitating Asbestos in Non-Friable Organically Bound Bulk Samples", Revision 1984, 8/3/92

This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP or any agency of the US Government. Results are verifiable for only those operations and analyses performed in the laboratory.

**Princeton Gamma-Tech, Inc.**

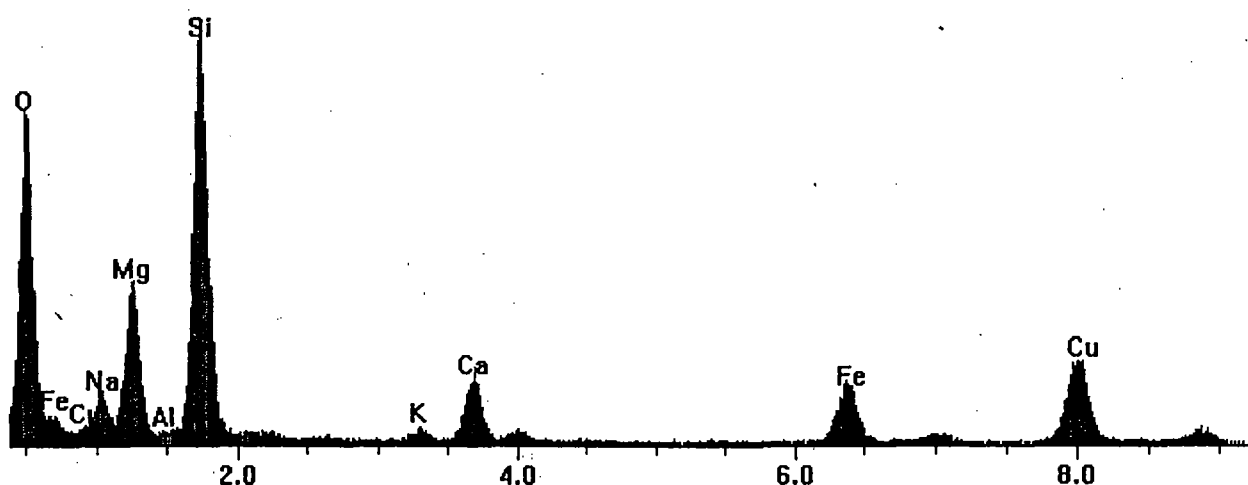
Spectrum Report  
Thursday, December 16, 2004

File: C:\Program Files\PGT\Data\115403.pgt  
Collected: December 16, 2004 09:09:20

Live Time: 65.35 Count Rate: 3298 Dead Time: 50.48 %  
Beam Voltage: 20.00 Beam Current: 2.00 Takeoff Angle: 31.00

■ 115403.pgt

FS: 2250



Element	Line	keV	KRatio	Wt%	At%	ChiSquared
Mg	KA1	1.254	0.0231	6.70	5.51	86.17
Si	KA1	1.740	0.0631	11.31	8.05	86.17
O	KA1	0.523	0.2527	62.46	78.02	86.17
Na	KA1	1.041	0.0070	2.99	2.59	86.17
Al	KA1	1.487	0.0003	0.06	0.04	86.17
Ca	KA1	3.691	0.0177	2.02	1.01	4.37
Fe	KA1	6.403	0.0341	3.78	1.35	3.30
K	KA1	3.313	0.0028	0.34	0.17	4.37
Cu	KA1	8.046	0.0833	10.34	3.25	9.28
Total				100.00	100.00	55.20

$$N_{net} \geq 2\sigma_{net} = \sqrt{2N_B + N_{net}}$$

$$= \sqrt{2(15.1) + 48.8}$$

$$= \sqrt{79}$$

$$N_{net} \geq 2\sigma_{net} = 8.89$$

Na is statistically sig.

$$48.8 \geq 17.78$$

January 10, 2005



Mr. Phil Peterson  
Fibertec, Inc.  
2280 Aurelius Road  
Holt, MI 48842

Subject: Determination of Mineral from Sample #3 on Project R008210

Dear Phil,

Please be informed that I have completed the analysis for the N-Forcer Site for the presence of asbestos in the samples submitted. APEX Research, Inc. has not found any of the 6 regulated asbestos types in these samples. Sample #3 of the samples submitted was composed of an amphibole mineral. Due to a significant Sodium peak in the EDXA (Spectra enclosed) the mineral falls outside the composition formulas associated with the regulated asbestos types. (Only Crocidilite contains a Na peak) This mineral is characterized as a "Libby Amphibole"; a category recommended by Dr. Jim Millet with MVA, Inc. in Norcross, Georgia. Dr. Millet recommends this mineral to be handled as asbestos.

I do think it is important to inform you that a debate, legal and scientific, is currently occurring as to whether or not this is to be treated as a regulated mineral or asbestos type. This mineral may cause modifications in the current asbestos regulations.

Please feel free to call me if you have any questions and I will contact you should I become aware of new information regarding this mineral.

Sincerely,

A handwritten signature in cursive script, appearing to read "Robert T. Letarte Jr.", written in dark ink.

Robert T. Letarte Jr.  
Laboratory Director  
Apex Research, Inc.



